

Los Angeles County Department of Public Health Hospital Questionnaire Regarding Antimicrobial Stewardship Programs: Final Results

This questionnaire was sent out to Los Angeles County (LAC) hospitals in November 2015 to assess the status of their Antimicrobial Stewardship Programs (ASP) and to gain a better understanding of what type of support Los Angeles County Department of Public Health (LACDPH) can provide them with.

Total responses: 51 out of 93 LAC hospitals (as of January 20th, 2016)*

SUMMARY OF RESPONDENTS (n=51)

Hospital Characteristic	Median (range)
Bed size	210 (36-912)
Average daily census	127 (0-466)
Number of Infection Preventionists (IPs)	2 (1-4)
Hospital Locations [†]	N (%)
SPA 1 & 2	10 (48%)
SPA 3 & 4	23 (60%)
SPA 5 & 6	5 (56%)
SPA 7 & 8	13 (52%)

SUMMARY OF NON-RESPONDENTS (n=42)

Hospital Characteristic	Median (range)
Bed size	252 (12-886)
Average daily census	135 (4-782)
Number of Infection Preventionists (IPs)	2 (1-12)
Hospital Locations [†]	N (%)
SPA 1 & 2	11 (52%)
SPA 3 & 4	15 (40%)
SPA 5 & 6	4 (44%)
SPA 7 & 8	12 (48%)

The differences between the respondents and non-respondents were not statistically significant.

Five responders answered the survey for multiple hospitals.

*6 hospitals in the City of Long Beach were not included in this analysis.

[†]LAC is divided into 8 Service Planning Areas (SPAs) for health care planning purposes.

MAJOR FINDINGS

All percentages below are calculated using the number of hospitals that responded to each question, which varies. For each section, LACDPH has recommended specific actions hospitals can take to improve their ASPs, and is working to provide better resources based on these responses.

ASP OVERVIEW:

- 35 hospitals (70%) have an ID Physician as their ASP head. (Figure 1)
 - 51 hospitals (100%) include pharmacists as members of their ASP; 48 (94%) include physicians; 44 (86%) include infection preventionists. (Figure 2)
 - 20 hospitals (39%) fall into the Advanced ASP Program tier, as defined by the [CDPH HAI Initiative](#) and [CA SB 1311](#). (Figure 5)
 - Of the 31 hospitals (61%) that fall into Intermediate or Basic Program tiers, 21 (68%) cite 'Insufficient protected time for ASP activities' as a major or moderate challenge in implementing the Advanced Program tier components in their facilities. (Figure 6)
- **Hospital Recommendation:** Facility leadership should make sure ASP team members have enough time to perform their activities¹. LACDPH recommends using the resources provided on page 3 to find ways to gain leadership commitment and to optimize your facility's ASP efforts.

ASP ACTIVITIES AND EDUCATION:

- 30 hospitals (60%) provide formal stewardship education to physicians, clinicians, or pharmacists; only 12 (24%) provide formal stewardship education to nursing staff. (Figures 7&8)
- **Hospital Recommendation:** Everyone plays a role in antimicrobial stewardship¹. LACDPH recommends that hospitals strive to include multiple disciplines and departments in their stewardship education and activities.

HEALTHCARE NETWORKS:

- 31 hospitals (63%) have a network of referring and accepting hospitals (including long-term acute care (LTACs)) and skilled nursing facilities (SNFs). (Figures 9&10)
 - 5 hospitals (11%) know that the SNFs in their network have stewardship activities; 39 (81%) don't know. (Figure 11)
 - 30 hospitals (64%) would be likely or extremely likely to provide educational materials and treatment guidelines for stewardship activities at their network SNFs. (Figure 12)
- **Hospital Recommendation:** A recent CDC VitalSigns² shows that knowledge of your inter-facility transfer network is essential in creating a coordinated approach to stop the spread of infections, including multi-drug resistant organisms, between healthcare facilities. LACDPH suggests that hospitals work more closely with their non-acute care facilities to ensure proper communication of patient status upon transfer and to offer support, as applicable/available, to help improve stewardship practices in resource-poor facilities.

1. "Core Elements of Hospital ASP." CDC. www.cdc.gov/getsmart/healthcare/implementation/core-elements.html.
2. CDC Vital Signs: Estimated Effects of a Coordinated Approach for Action to Reduce Antibiotic-Resistant Infections in Health Care Facilities- United States. August 7, 2015 / 64(30);826-831.

LOCAL SUPPORT:

- 43 hospitals (88%) feel it is extremely or very important for LACDPH to develop regional guidelines for best stewardship practices. (Figure 13)
 - 42 hospitals (86%) feel it is extremely or very important for LACDPH to develop regional guidelines for syndrome-specific antimicrobials. (Figure 13)
 - 41 hospitals (84%) feel it is extremely or very important for LACDPH to provide education of non-ASP providers on stewardship. (Figure 13)
- **LACDPH Action Items:**
- *LAC Clostridium difficile Infection (CDI) Prevention Collaborative: LACDPH has started a pilot CDI collaborative, modeled after the Orange County/CDPH CDI Collaborative, to promote evidence-based practices for reduction of CDI (including antimicrobial stewardship and other topics in the prevention of CDI), as well as to collect best practices and lessons learned that will later be shared with all healthcare facilities.*
 - *LAC Regional Antibigram Task Force: LACDPH has convened a group of experts to help generate a regional antibiogram, and to help provide guidelines for targeted facilities.*
 - *LACDPH will collaborate to assemble and disseminate education and outreach to facilities to help improve antimicrobial stewardship, antibiogram analysis, and/or laboratory testing methods across LAC healthcare facilities.*

RESOURCES FOR HOSPITALS:

- CDC Core Elements of ASP: <http://www.cdc.gov/getsmart/healthcare/implementation/core-elements.html>
- IDSA/SHEA ASP Guidelines (2016): <http://idac.org/ASP%20IDSA%20Guidelines.pdf>
- NQF ASP Playbook (2016): http://www.qualityforum.org/Publications/2016/05/Antibiotic_Stewardship_Playbook.aspx?utm_source=internal&utm_medium=link&utm_term=ABX&utm_content=Playbook&utm_campaign=ABX
- Coming soon: LACDPH inter-facility transfer form; regional summary of healthcare-associated infections and drug-resistant organisms; and materials to improve antibiotic prescribing as part of CDC's Get Smart about Antibiotics Week.
 - For more information about Get Smart about Antibiotics Week, please visit: <http://www.cdc.gov/getsmart/community/index.html>
- For more information and resources, please visit the Acute Communicable Disease Control website: <http://publichealth.lacounty.gov/acd/AntimicrobialStewardship.htm>

If you have any questions, concerns, or would like to work more with LACDPH, please do not hesitate to reach out to any of the following staff in the Healthcare Outreach Unit:

- Your LACDPH Liaison Public Health Nurse
- Sandeep Bhaurla (Epidemiology Analyst): sbhaurla@ph.lacounty.gov
- Patricia Marquez (Epidemiologist): pmarquez@ph.lacounty.gov
- Dr. Dawn Terashita (Medical Epidemiologist): dterashita@ph.lacounty.gov

DATA RESULTS

ASP OVERVIEW

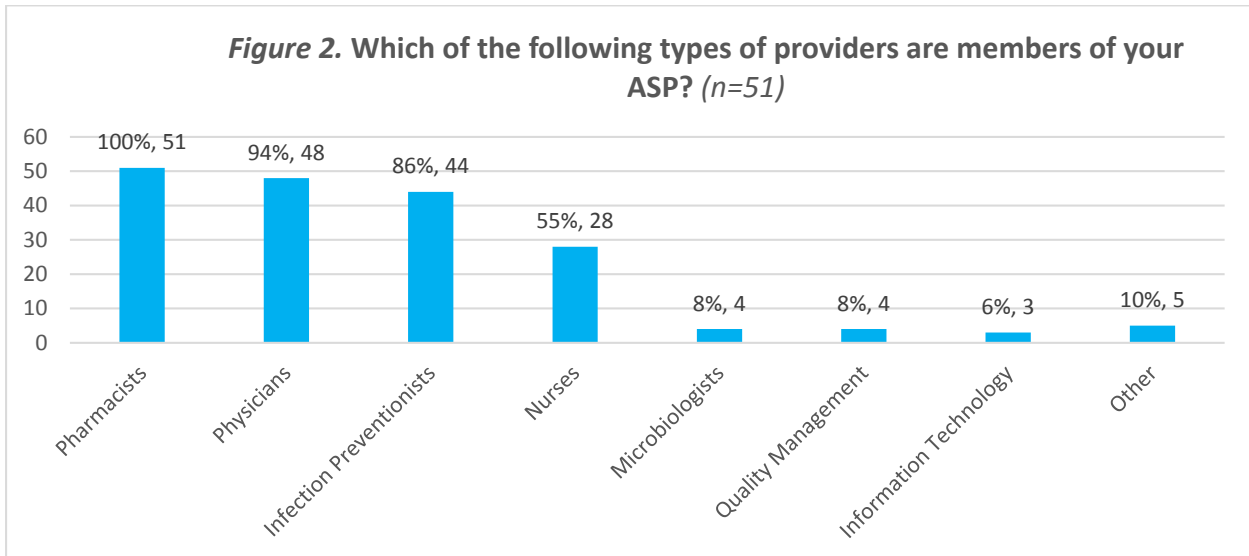
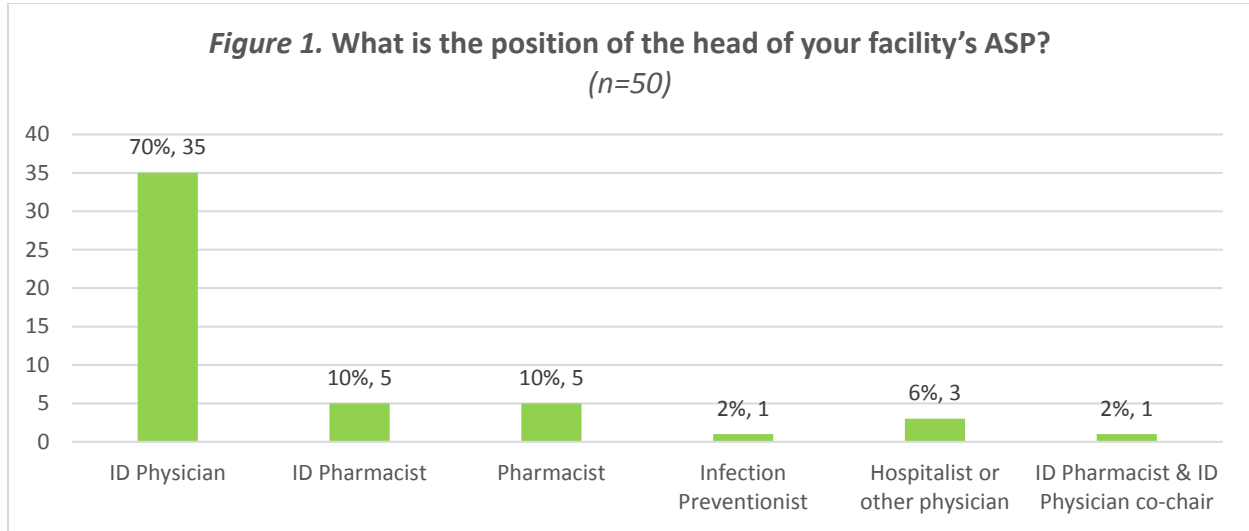


Figure 3. Does your facility have ID physicians available for consultation? (n=51)

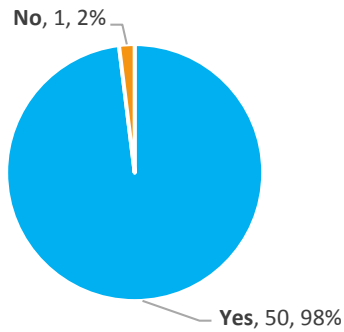


Figure 4. Does your facility have ID pharmacists available for consultation? (n=51)

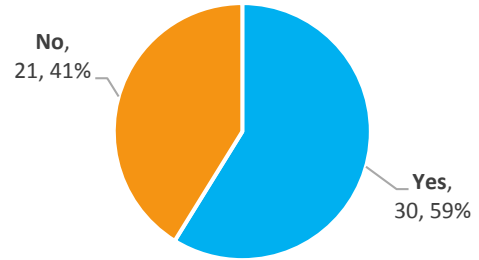


Figure 5. Using the categories set by California Department of Public Health (CDPH) HAI Initiative and California Senate Bill 1311, which program tier does your ASP belong to? (n=51)

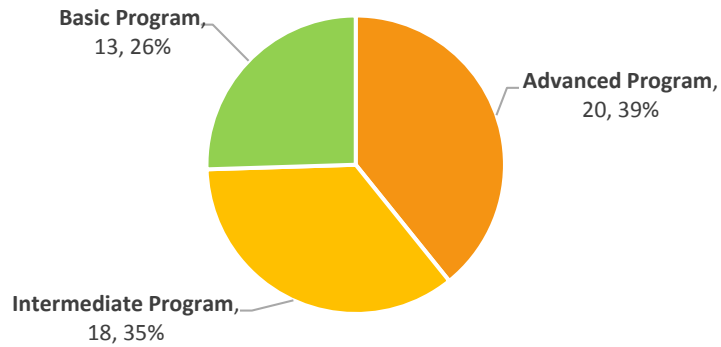
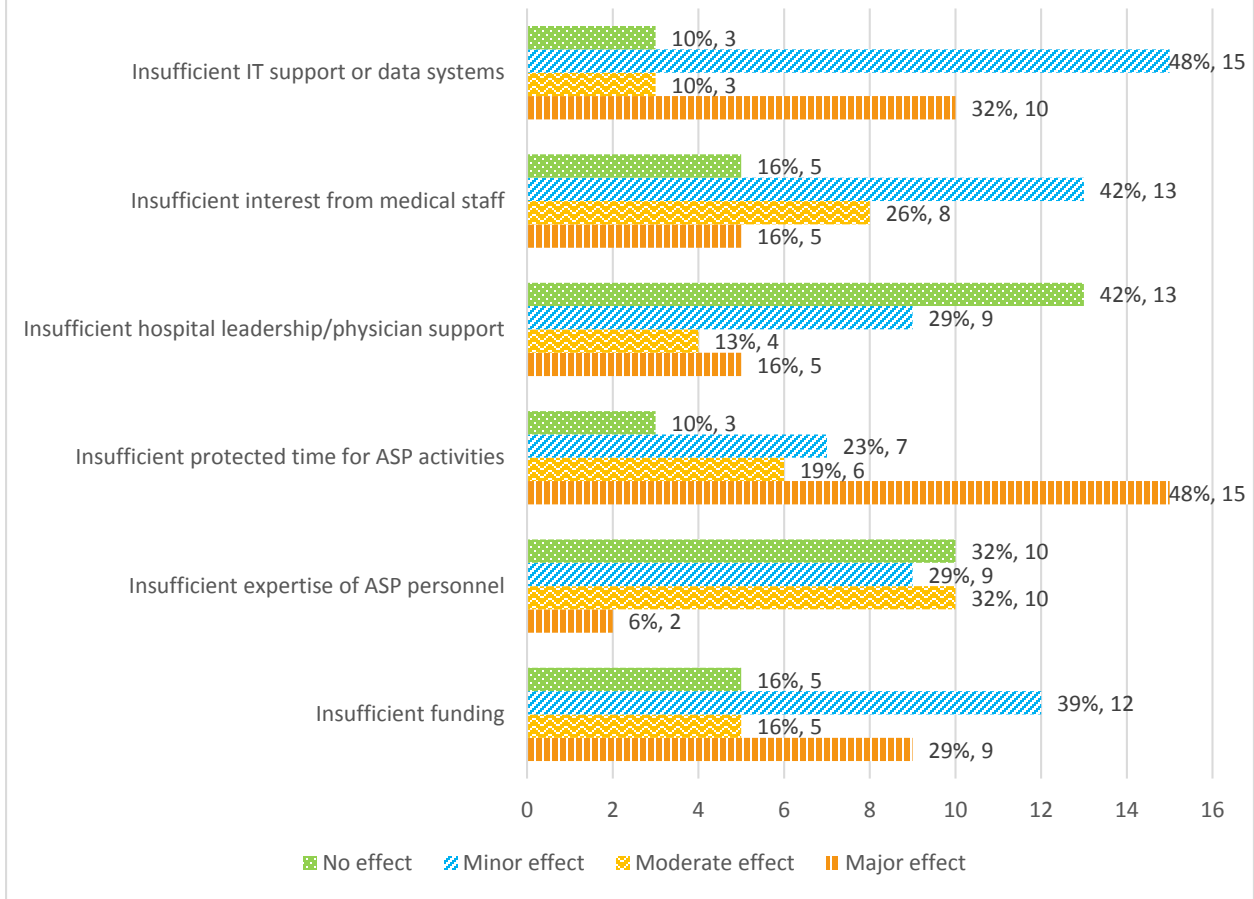


Figure 6. If your program falls within the Intermediate or Basic Program tier, please describe how various challenges may prevent, hinder, or delay your ability to implement Advanced Program tier elements. (n=31)



ASP ACTIVITIES AND EDUCATION

Figure 7. Does your facility provide formal stewardship education for the facility's physicians, other clinicians, or pharmacists? (n=50)

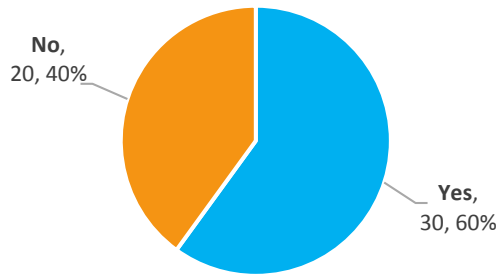
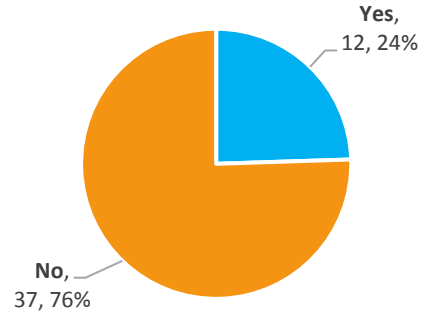


Figure 8. Does your facility provide formal stewardship education to bedside nursing staff? (n=49)



HEALTHCARE NETWORKS

Figure 9. Do you have a network of referring and accepting hospitals (including long-term acute care facilities (LTACs))? (n=49)

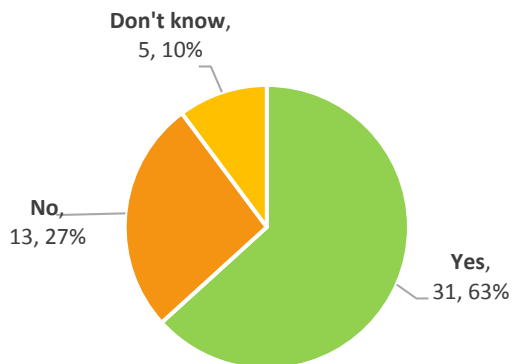


Figure 10. Do you have a network of referring and accepting skilled nursing facilities (SNFs)? (n=49)

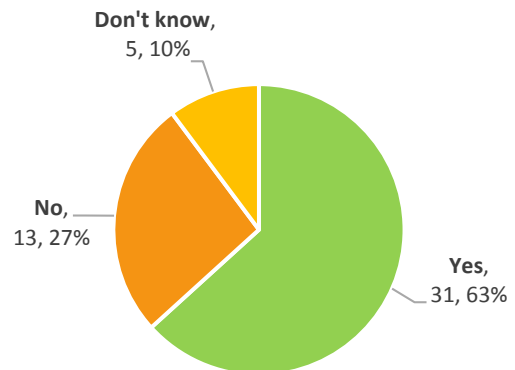


Figure 11. Do the SNFs in your facility's network have any stewardship activities? (n=48)

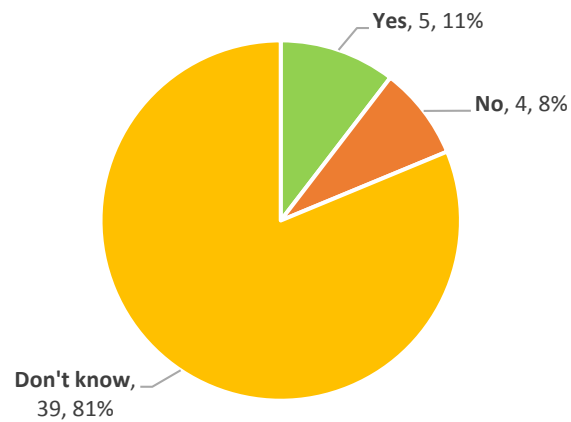
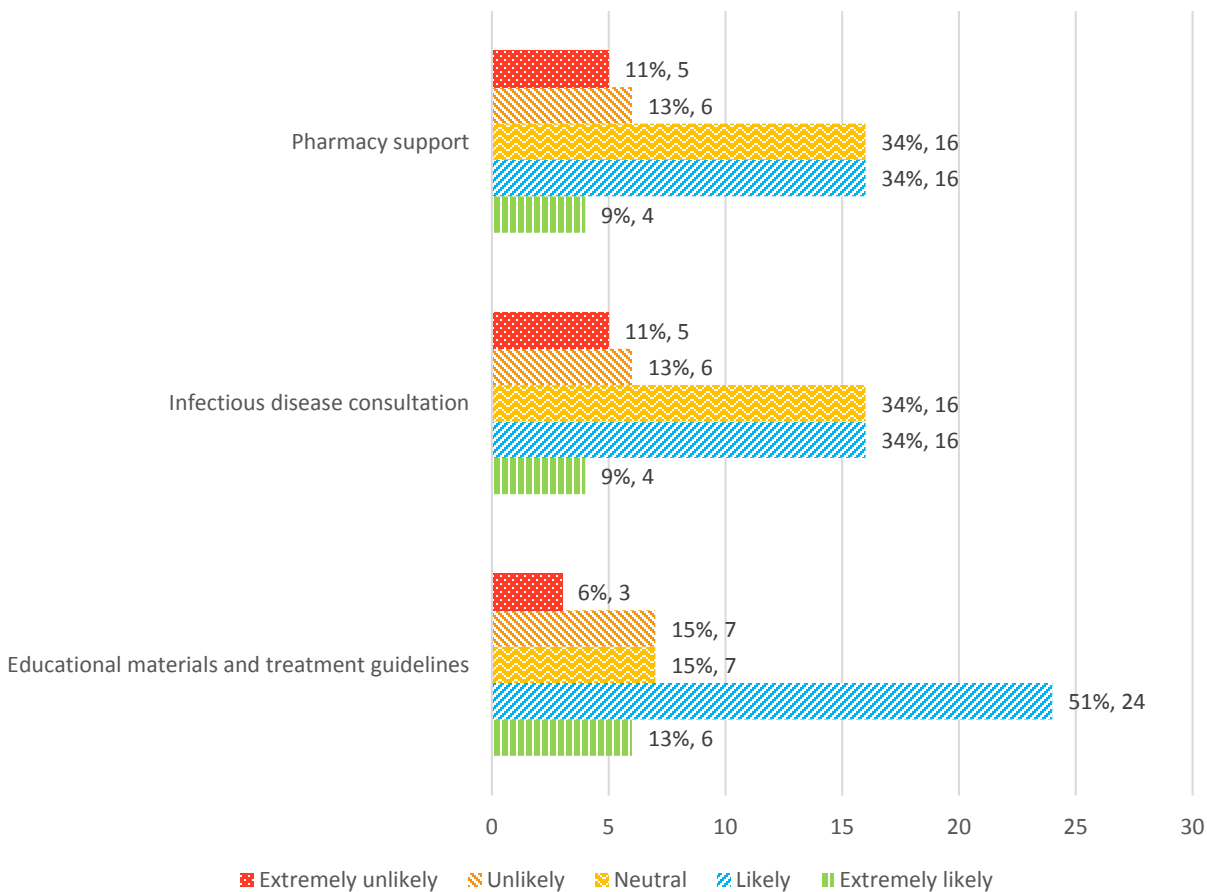
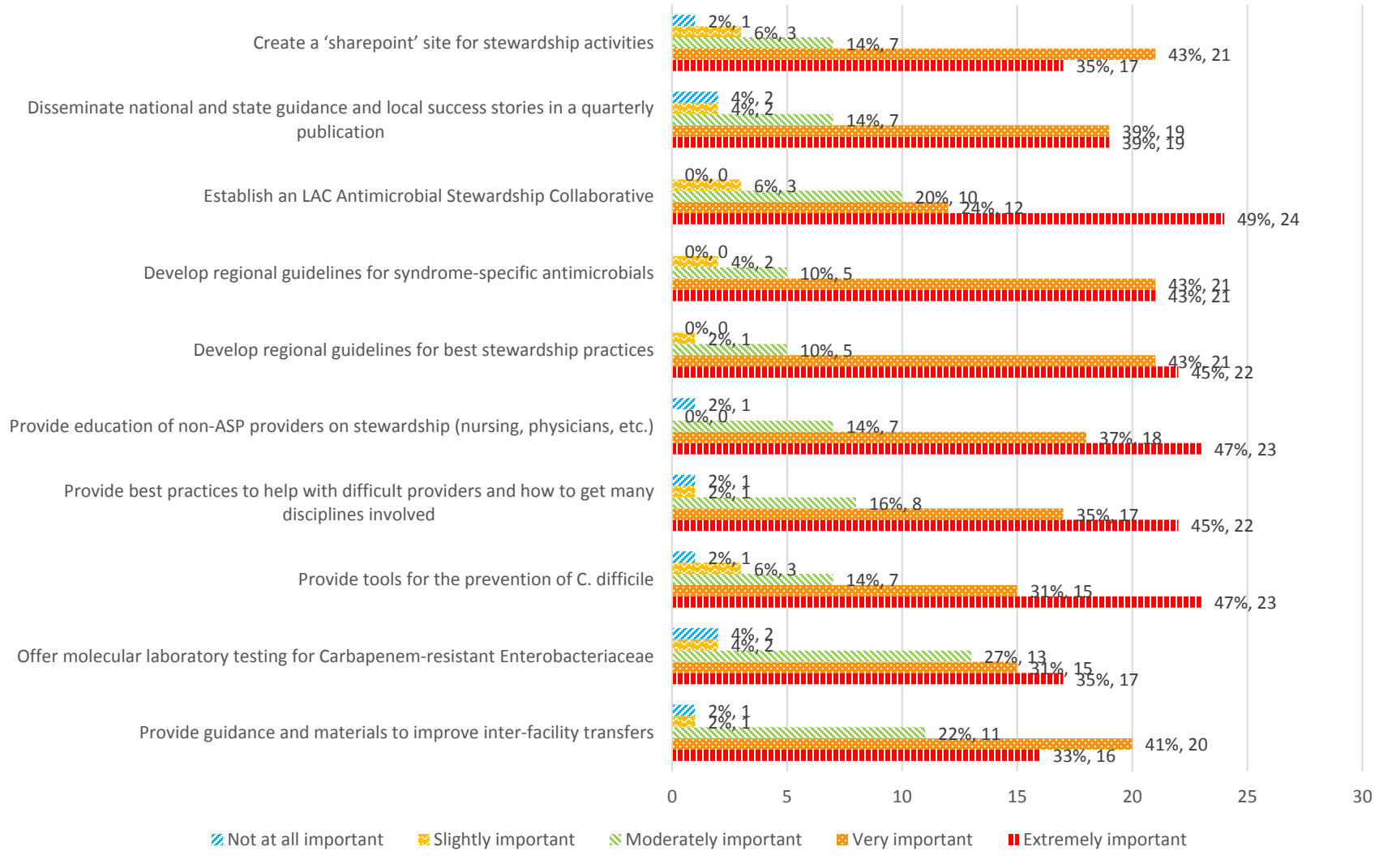


Figure 12. In the next several years, SNFs will be required to have stewardship programs in place. How likely would your hospital be able to provide the following types of support to your network SNFs? (n=47)



LOCAL SUPPORT

Figure 13. Rank the importance of potential LAC DPH activities and support to help you advance your antimicrobial stewardship activities and objectives. (n=49)



Implementation of CDC's Core Elements of Hospital ASP in Los Angeles County

The Annual Hospital Survey is required to be completed every year by all hospitals reporting data to the National Healthcare Safety Network (NHSN). Some questions ask whether hospitals have implemented any of the CDC's seven [Core Elements of Hospital ASP](#). 86 of 99 hospitals in LAC completed the survey in 2015 (including Long Beach). Their responses to the ASP questions are summarized here.

CDC Core ASP Element Implemented	N (%)
1. Salary Support (Leadership Commitment)	57 (67.1%)
2. Leader Responsible for Program Outcomes	81 (95.3%)
3. Pharmacist Responsible for Improving Antibiotic Use	83 (97.7%)
4. Action:	
Antibiotic Approval	66 (77.7%)
Antibiotic Audit With Feedback	77 (90.6%)
Antibiotic Treatment Recommendations	70 (82.4%)
Policy To Require Prescribers To Document Antibiotic Use In Medical Record	30 (35.3%)
5. Monitor Antibiotic Use	76 (89.4%)
6. Stewardship Program Feedback	68 (80%)
7. Stewardship Program Education	69 (81.2%)